

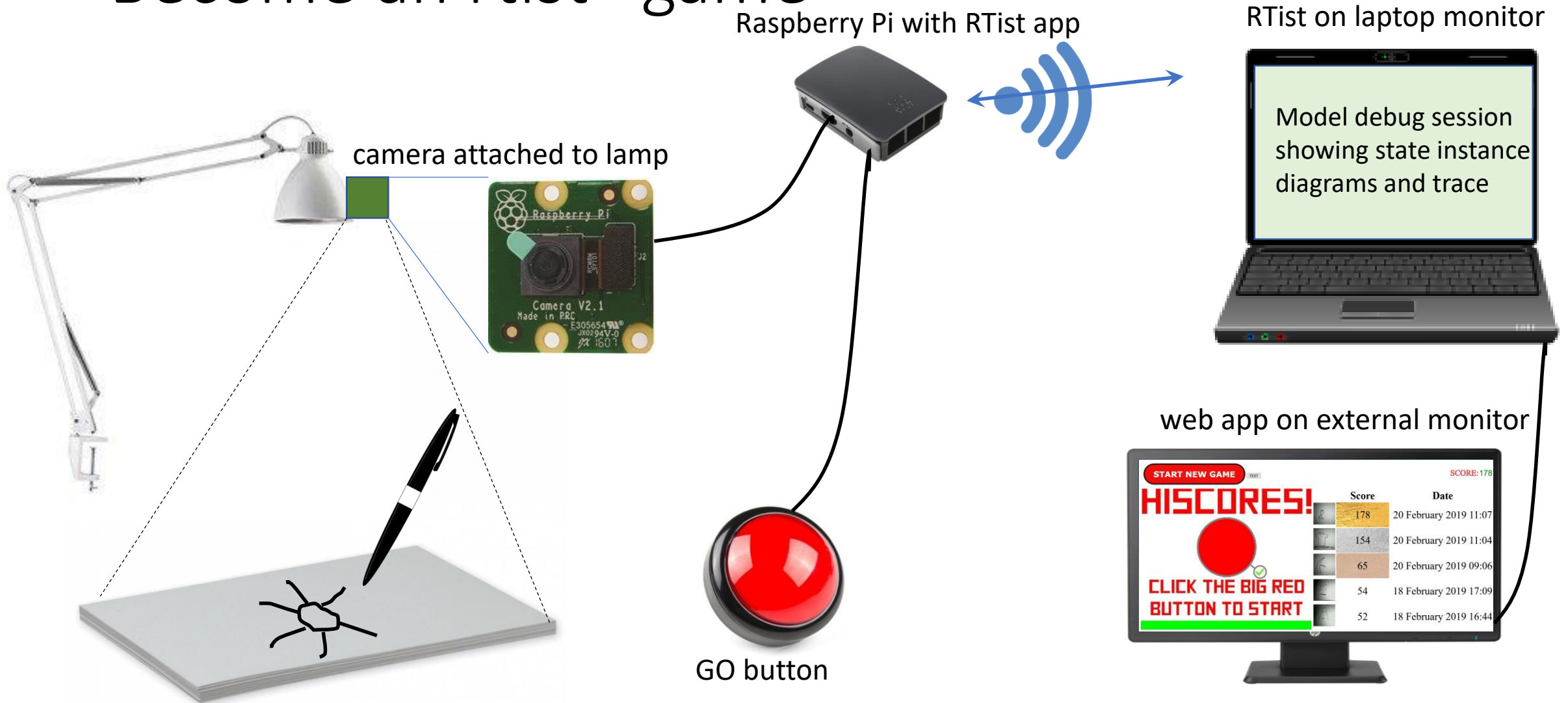
Become An RTist

IoT & Edge Computing Demo Application for HCL Rtist

A Sketch Drawing Game (inspired by [Google QuickDraw](#))

- The player gets a random word (e.g. car, horse, house...)
- He or she now has to draw the word on a paper in at most 20 sec.
- If the drawing is ready before 20 sec the player hits a big GO button
- When the GO button has been pressed, a camera takes a picture of the drawing
- The RTist application now analyzes the picture and tries to guess what the player has drawn
- If it cannot guess correctly, and time is up, the game is over. Otherwise it just tells the user it cannot guess the word, and he can modify the drawing and then press the GO button again.
- If the RTist app can guess the word, the player score increases (higher score the less time spent drawing, and also the more certain the image recognition was). The player then gets another word to guess.
- When the game is over, the player's score is compared with a high score list. If the score qualifies for the high score list, the player is asked to write his name on the sketch and press the GO button again. A photo of the sketch is taken and stored in the high score list together with the date and score.

"Become an artist" game



How does it work?

- ▶ Game logic and code for controlling physical devices (camera and push button) is implemented in RTist. It runs on the Raspberry Pi.
- ▶ Image recognition runs in a separate Python app on the Raspberry Pi. It uses Tensorflow and provides an HTTP interface to speed up recognition.
- ▶ The web server is implemented in Node JS and runs on another computer.
- ▶ The web app runs in a web browser anywhere.

